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- (71) Applicant (for all designated States except US): **DY-
NAPIX INTELLIGENCE IMAGING INC.** [CA/CA];
3575 St-Laurent Blvd., Suite 199, Montréal, Québec H2X
2T7 (CA).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **BOUDREAU,**

Alexandre, J. [CA/CA]; 4763 Victoria, Montréal,
Québec H3W 2M9 (CA). **DUBE, Patrick** [CA/CA]; 403,
St-Joseph Ouest, Apt. 18, Outremont, Québec H2V 2P3
(CA). **KAUFFMANN, Claude** [CA/CA]; 4100 Avenue
Laval, Montréal, Québec H2W 2J3 (CA). **EL ABIDINE,**
Khaldoune, Zine [CA/CA]; 1735, rue Deguire, Apr. 9,
St-Laurent, Québec H4L 1M8 (CA).

(74) Agents: **MANOLAKIS, Emmanuel et al.**; Gowling
Lafleur Henderson LLP, 1 Place Ville Marie, 37th Floor,
Montréal, Québec H3B 3P4 (CA).

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(54) Title: A SYSTEM FOR ANALYZING AND MANAGING IMAGE INFORMATION

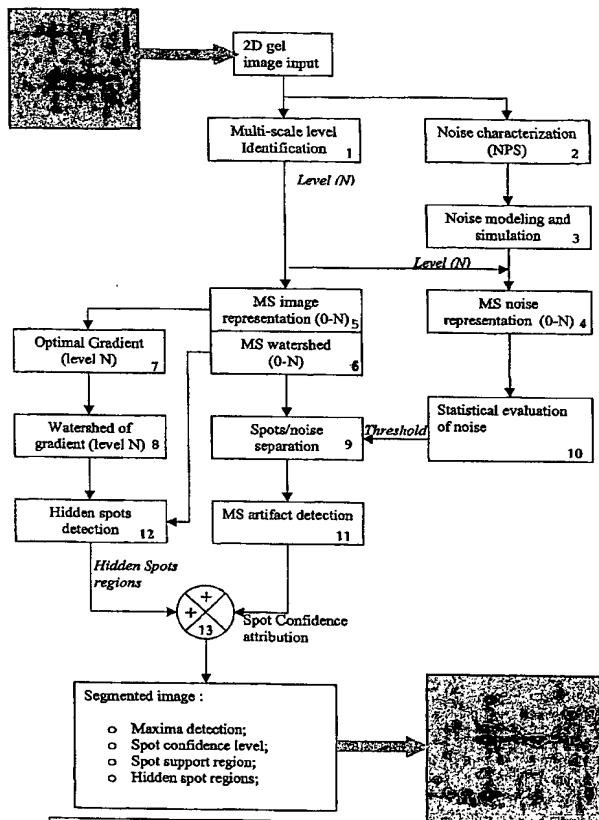


Figure 1: overall image analysis method

(57) Abstract: A segmentation method is provided for the automated segmentation of spot-light structures into D images allowing precise quantification and classification of said structures and said images, based on a plurality of criteria, and further allowing the automated identification of multi-spot based patterns present in one or a plurality of images. In a preferred embodiment, the invention is used for the analysis of 2D gel electrophoresis images, with objective of quantifying protein expressions and for allowing sophisticated multi-protein pattern based image data mining, as well as image matching, registration, and automated classification.

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